

## Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Arnica montana*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-BETA-ETHOXY-6-O-ISOBUTYRYL-2,3-DIHYDROHELENALIN	Flower	--	--		
0	4-HYDROXY-THYMOL-DIMETHYL-ETHER	Rhizome	--	--		
0	6-O-ISOBUTYRYL-TETRAHYDROHELENALIN	Flower	--	--		
0	8,9-DEHYDRO-4-HYDROXY-THYMOL-DIMETHYL-ETHER	Rhizome	--	--		
1	ANGELIC-ACID	Rhizome	--	--		
0	ARBICIN	Root	--	--		
1	ARNICOLIDE	Leaf	--	--		
1	ARNIDIOL	Flower	--	--		
0	ARNIFOLIN	Leaf	--	--		
0	ARNISTEROL	Flower	--	--		
7	ASTRAGALIN	Flower	--	--		
0	BALDRIANIC-ACID	Rhizome	--	--		
0	BETA-LACTUCEROL	Flower	--	--		
47	BETA-SITOSTEROL	Flower	--	--		
14	BETAINE	Flower	--	--		
0	BETULETOL	Flower	--	--		
102	CAFFEIC-ACID	Flower	--	--		
0	CARNAUBYLALCOHOL	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CATECHIN-TANNINS	Rhizome	23000	23000		
77	CHLOROGENIC-ACID	Flower	--	--		
20	CHOLINE	Flower	--	--		
0	DIEN-TETRAIN	Flower	--	--		
9	DIHYDROHELENALIN	Plant	--	--		
0	DIOXYSTEARIC-ACID	Flower	--	--		
0	EN-PENTAIN	Flower	--	--		
0	EO	Root	17700	37400	1.1068455723271557	
0	EO	Flower	400	1400	-0.376713254264274	
0	EO	Rhizome	5000	63100	0.25151146843707856	
0	EUPAFOLIN	Flower	--	--		
2	FARADIOL	Flower	--	--		
13	FORMIC-ACID	Rhizome	--	--		
8	FRUCTOSE	Rhizome	25000	25000	-0.662945600104255	
7	FUMARIC-ACID	Rhizome	--	--		
62	GALLIC-ACID	Flower	--	--		
34	HELENALIN	Plant	--	--		
2	HELENIEN	Flower	--	--		
0	HEPTADECATRIIEN-(1,7,9)-TRIIN-(11,13,15)	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	HISPIDULIN	Flower	--	--		
19	INULIN	Flower	--	--		
19	INULIN	Rhizome	90000	120000	1	
2	ISOBUTYRIC-ACID	Rhizome	--	--		
0	ISOBUTYRIC-ACIDPHLORYLESTER	Rhizome	--	--		
22	ISOQUERCITRIN	Flower	--	--		
0	LACINIATIN	Flower	--	--		
8	LACTIC-ACID	Rhizome	--	--		
7	LAURIC-ACID	Flower	--	--		
15	LUTEIN	Flower	--	--		
78	LUTEOLIN	Flower	--	--		
0	LUTEOLIN-7-O-MONOGLUCOSIDE	Flower	--	--		
0	M-PHLOROL-METHYL-ETHER	Rhizome	--	--		
15	MALIC-ACID	Flower	--	--		
3	MUCILAGE	Rhizome	--	--		
13	PALMITIC-ACID	Flower	--	--		
2	PATULETIN	Flower	--	--		
0	PENTAIN-ON	Flower	--	--		
2	PHYSTOSTEROLS	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	QUERCETIN-3-GLUCO-GALACURONIDE	Flower	--	--		
0	REDUCING-SUGARS	Rhizome	5000	5000	-1	
0	SPINACETIN	Flower	--	--		
8	STEARIC-ACID	Flower	--	--		
7	SUCCINIC-ACID	Rhizome	--	--		
14	SUCROSE	Rhizome	10000	10000	-0.889354596263753	
2	TARAXASTEROL	Flower	--	--		
71	THYMOL	Flower	--	--		
0	THYMOL-HYDROQUINONE-DIMETHYL-ETHER	Rhizome	--	--		
0	THYMOL-METHYL-ETHER	Flower	--	--		
0	TRIDECADIEN-(1,11)-TETRAIN-(3,5,7,9)	Flower	--	--		
0	TRIDECADIEN-(3,5)-TRIIN-(7,9,11)-OL-(1)-ACETATE	Flower	--	--		
0	TRIDecaen-TETRAIN	Rhizome	--	--		
0	TRIDECAPENTAIN	Rhizome	--	--		
0	TRIDECATRIEN-(1,3,5)-TRIIN-(7,9,11)	Flower	--	--		
0	TRIDECEN-(1)-PENTAIN(3,5,7,9,11)	Flower	--	--		
1	TRIMETHYLAMINE	Flower	--	--		
3	XANTHOPHYLL	Flower	--	--		
0	XANTHOPHYLL-EPOXIDE	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	ZEAXANTHIN	Flower	--	--		